

### **REMARKS/ARGUMENTS**

This Amendment is in response to an Office Action mailed August 6, 2004. Applicants respectfully disagree with the response to the arguments set forth in paragraph 2 of the Office Action and respectfully traverse each and every rejection set forth in the Office Action. For clarity sake, claims 2, 5, 6, 10, 15, and 20 have been amended and the remarks will focus on the allowability of the pending claims. Reconsideration of all of the pending claims including each and every dependent claim is respectfully requested.

With respect to paragraph 4 of the Office Action, Applicants respectfully traverse the rejection that the written description requirement has not been satisfied based on the teachings set forth in the specification. However, Applicants have amended claims 2, 5, 10, 15, and 20 to remove the limitation that the data frame is broadcast prior to receipt of any signaling from a device receiving the DTIM beacon. This limitation has been voluntarily removed in order to seek a different scope of protection than previously sought in the prior pending claims. Withdrawal of the § 112, first paragraph rejection is respectfully requested.

With respect to paragraph 6 of the Office Action, claims 2, 3, 5-8, 10, 12-16, 18-20, 22 and 24-30 are rejected under 35 USC § 103(a) as being unpatentable over Beach (US Patent No. 6,067,297) in view of an article entitled, "A New Efficient Access Protocol for Integrating Multimedia Services in the Home Environment" (IEEE, June 1999) by Koutroubinas, et al (hereinafter referred to as "Koutroubinas"). Applicants respectfully traverse the rejection because the *prima facie* case of obviousness has not been established.

As the Examiner is aware, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. See MPEP §2143, p.2100, 124(8<sup>th</sup> Ed., rev.1, Feb 2003); see also *In Re Fine*, 873 F. 2d 1071, 5 U.S.P.Q.2D 1596 (Fed. Cir. 1988). Herein, at a minimum, the combined teachings of the cited references do not describe or suggest all the claim limitations.

I. §103(A) REJECTION OF INDEPENDENT CLAIMS 2 & 20

With respect to claim 2, the Office Action alleges that Koutroubinas teaches a special DTIM beacon with a field having a traffic indicator bit (e.g., Network Allocation Vector NAV value) that is set to denote transmission of a data frame after the special beacon. *See Page 5 of the Office Action*. Applicants respectfully disagree with this allegation. It is noted that page 483 (column 2, paragraphs 3-5) of Koutroubinas describes the setting of a Network Allocation Vector (NAV) value. However, the NAV value is a timing value associated with each station and is not a value within a field of the DTIM beacon. In fact, Koutroubinas explicitly states that “[e]very station in the network buffers its data and postpones any pending transmission to the appropriate time instance, by setting its Network Allocation Vector (NAV) value.” *See Page 483, para. 4 of Koutroubinas*.

Based on this difference alone, Applicants respectfully submit that a *prima facie* case of obviousness has not been established because neither Beach nor Koutroubinas, alone or in combination, teach the traffic indicator bit as claimed. Allowance of independent claims 2 and 20 as well as independent claims 5, which includes this limitation as well, is respectfully requested.

Furthermore, the Office Action alleges that Beach teaches broadcasting data that comprises at least load balancing information which is supposedly taught by the “hopstick field” (see column 16, lines 42-46 of Beach) as well as the “hopping pattern, timing information, and associated mobile units” (see column, 1 lines 40-60 of Beach). Applicants respectfully traverse this rejection because the hopstick field is not equivalent to load balancing. Rather, it is merely a value used by the MU (mobile units) to maintain hop alignment. *See Column 16, lines 44-45 of Beach*.

Furthermore, the “hopping pattern, timing information and associated mobile units” teachings of Beach are not included within a data frame, but rather, are simply information within a management frame (e.g., Probe Response packet) sent by a mobile unit. In particular, column 1, lines 40-60 of Beach describe a PROBE RESPONSE packet that includes

“information such as the access unit address, the hopping pattern, the present channel, the time left in the present channel and other timing information.” *See Column 1, lines 48-52 of Beach.* The PROBE RESPONSE packet in accordance with IEEE 80211 is well-known type of *management* frame, not a data frame as claimed. Therefore, the presence of this information in a management frame teaches away from the claimed invention which is directed to the inclusion of load balancing information within a data frame following a special DTIM frame as claimed.

Based on this difference, Applicants respectfully submit that a *prima facie* case of obviousness has again not been established for independent claims 2 and 20 as well as independent claim 5.

## II. §103(A) REJECTION OF INDEPENDENT CLAIM 5

With respect to claim 5, Applicants respectfully traverse the rejection for the reasons set forth above and because the combined teachings of Beach and Koutroubinas do not describe or suggest a field that indicates to a mobile unit that the DTIM beacon will be followed by a data frame in order to enable a mobile unit to remain powered on to receive the information. The data frames are broadcast after a definitive time period has elapsed after the broadcast of the special beacon. This is not equivalent to the teachings of Koutroubinas that defines the timing of isochronous traffic (i.e., data frames by the mobile units, not access point) by setting the NAV timers for every station in the network.

In light of foregoing, the §103 rejection as applied to claim 5 should be withdrawn because a *prima facie* case of obviousness has not been established.

With respect to claim 6, Applicants respectfully traverse the rejection because neither Koutroubinas nor Beach, alone or in combination, specifically teach or suggest that the data frame is to be broadcast *immediately* after the broadcast of the special DTIM beacon. Emphasis added. Instead, Koutroubinas teaches the transmission of a Poll packet, which is not a Beacon frame. Even if the Examiner mistakenly considers the Poll Packet as being equivalent to a Beacon frame, the Examiner cannot consider the transmission of traffic (ISO1) to suggest the transmission of the data frame immediately after the special DTIM beacon frame because the

ISO1 traffic involves data frames sent from the mobile units, not from the access point as claimed. This limitation is also included in independent claim 20.

In light of the forgoing, the §103 rejection as applied to claim 6 should be withdrawn because a *prima facie* case of obviousness has not been established. Moreover, this withdrawal would warrant the allowance of independent claim 20 since this limitation is included therein.

### III. §103(A) REJECTION OF INDEPENDENT CLAIMS 10 & 15

With respect to claims 10, 15 and 16, it is alleged that the combination of Beach and Koutroubinas teaches the method set forth in independent claim 2 and Beach provides further teachings regarding additional limitations. *See Page 7 of the Office Action.* Applicants respectfully disagree with this analysis because claims 10 and 15 are directed to a modified beacon inclusive of additional information elements in lieu of transmission of a subsequent data frame as set forth in independent claim 2. Since the teachings of Beach and Koutroubinas should have little application to the limitations set forth in claims 10 and 15.

With respect to rejection of claims 10 and 15, the Office Action states that Beach teaches a modified beacon that comprises an access point name (considered to be “AP\_ID” set forth in column 11, line 3 of Beach), an access point identifier (considered to be the “identifying address” set forth in column 1, lines 47-48 of Beach) and an associated first frame sequence (considered to be the “CRC” set forth in column 12, line 54-column 13, line 4 of Beach). Applicants respectfully disagree with this interpretation.

First, the access point name (AP\_ID) is data provided by the PROBE REQUEST frame from an “MU,” and is not included in a beacon described in Beach. *See Column 11, lines 3-4 of Beach.* Second, the identifying address is contained in a PROBE REQUEST frame. *See Column 1, lines 47-48 of Beach.* Lastly, the CRC set forth in column 12, lines 54 through column 13, lines 4 of Beach is *not directed to the plurality of additional information elements* comprising the access point name, the access point identifier information and load balancing information as set forth in claims 10 and 15. *Emphasis added.* It is important to note that the frame check sequence is associated with the *additional information elements* while a second frame check

sequence is associated with the modified beacon as set forth in claims 11 and 17. *Emphasis added.*

In light of the forgoing, the §103 rejection as applied to claims 10 and 15 should be withdrawn because a *prima facie* case of obviousness has not been established.

#### IV. §103(A) REJECTION OF REMAINDER OF CLAIMS

For the record, Applicants respectfully traverse all of the rejections associated with each and every claim, including the dependent claims. Since the independent claims are allowable based on the arguments set forth above, Applicants have refrained from submitting further arguments as to the grounds for traversing many of the dependent claims. However, Applicants reserve the right to present these arguments if an appeal is warranted

In order facilitate prosecution of the subject application, Applicants respectfully request the Examiner to contact the undersigned attorney to discuss the allowability of the pending claims. The undersigned attorney can be reached at the phone number listed below.

Appl. No. 09/753,227  
Nortel Ref. No. 12917SS  
Amdt. Dated 11/04/2004  
Reply to Office Action dated August 6, 2004

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**Conclusion**

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: November 4, 2004

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